

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COM-United States Parent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandria, Vingenia 22313-1450 a.u. # usptin giov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	AFFORNEY DOCKET NO	CONFIRMATION NO
907008,143	08.03/2006	5926237	8733.059.61	6948
38827 MCKENN	7598 #118-2014 A LONG & ALDRIDO	JE I I D	EXAMINER ART UNIT PAPER NUMBER	
1900 K STR	EET, NW TON, DC 20006	JE EE(

DATE MAILED: 01/18/2011

Please find below and/or attached an Office communication concerning this application or proceeding.



McKENNA LONG & ALDRIDGE, LLP

Commissioner for Patents United States Patent and Trademark Office P (0 Box 1450 Alexandria, VA 22313-1450 www.upto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Bruce Lagerman Lagerman and Associates, PLLC 11921 Freedom Drive, Suite 550 Reston, VA 20190 MAILED

JAN 18 2011

CENTRAL REEXAMINATION UNIT

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/008,143.

PATENT NO. 5926237.

ART UNIT 3992.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination		Control No. 90/008,143	Patent Under Reexamination 5926237				
<i></i>	Ce Action in Ex Parte Heexamination	Examiner Woo H. Choi	Art Unit 3992				
	The MAILING DATE of this communication appe	ears on the cover sheet	with the correspondence address				
a⊠ A c∐ A	tesponsive to the communication(s) filed on 14 Septemb statement under 37 CFR 1.530 has not been received f	<i>er 2010</i>	s action is made FINAL.				
certific	tened statutory period for response to this action is set to respond within the period for response will result in teate in accordance with this action, 37 CFR 1.550(d). EXperiod for response specified above is less than thirty (30 considered timely.	ermination of the proceedi	ng and issuance of an ex parte reexamination				
Part I	THE FOLLOWING ATTACHMENT(S) ARE PART OF	THIS ACTION:					
1.	Notice of References Cited by Examiner, PTO-892	2. 3. 🗍 Intervie	w Summary, PTO-474.				
2.	Information Disclosure Statement, PTO/SB/08.	4. 🔲	January, 170-474.				
Part II	SUMMARY OF ACTION						
1a.	Claims <u>1-65</u> are subject to reexamination.						
1b.	Claims are not subject to reexamination.						
2.	Claims have been canceled in the present reexamination proceeding.						
3.	Claims are patentable and/or confirmed.	g.					
4.	Claims 1-65 are rejected.						
5.	Claims are objected to.						
6.	The drawings, filed on are acceptable.						
7.	☐ The proposed drawing correction, filed on ha	as been (7a) approved	(7b) disapproved				
8.	Acknowledgment is made of the priority claim under						
	a) ☐ All b) ☐ Some* c) ☐ None of the certified		. (4)				
	t☐ been received.						
	2 not been received.						
	3☐ been filed in Application No						
	4 been filed in reexamination Control No						
	5 been received by the International Bureau in F	PCT application No					
	* See the attached detailed Office action for a list of t						
9.		issuance of an ex nade of	ovamination and Casta and Casta				
10.	Other:						
			ļ				
			Ì				
			j				

Art Unit: 3992

DETAILED ACTION

Reexamination

1. This is an *ex parte* reexamination of U.S. Patent No. 5,926,237 ('237 patent) requested by a third party requester. Claims 1–65 are subject to reexamination. The references discussed herein are as follows:

Japanese Pat. App. Pub. No 07099394 ("Masanori");

1237 patent's Admitted Prior Art ("APA");

US Patent No. 5,666,261 ("Aguilera");

US Patent No. 5,375,005 ("Komano").

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

- (a) the invention was known or used by others in this country, or paterned or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public ase or sm sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 15, 16, 19-21, 23-26, 29-31, 33, 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Masanori.
- 4. With respect to claim 15, Masanori discloses a method of forming a liquid crystal display device comprising the steps of:

forming a first frame (Figure 3, bottom portion of the LCD module 1 support structure encasing the backlight mechanism 4);

forming a liquid crystal panel (LCD panel 2) adjacent the first frame and having a display surface; and

forming a second frame (Figure 2, "vessel" 6) coupled to the first frame (see Figure 2, the "vessel" 6 is coupled to the entire module 1, including the support structure), and having a fastening part (Figures 1 and 2, side mounting holes 13 and screws 11) at at least one side edge of the second frame, the side edge being substantially perpendicular to the display surface of the liquid crystal panel;

wherein the liquid crystal display device is attachable to a housing through the side edge (see Figure 1).

- 5. With respect to claim 16, the fastening part includes a hole (Figures 1 and 2, screw holes 13).
- 6. With respect to claim 19, the liquid crystal display device is immovable within the housing (see Figure 1, the device becomes immovable once secured with screws).
- 7. With respect to claim 20, fastening part includes a screw attaching the liquid crystal display device to the housing by passing through at least one hole (see Figures 1 and 2).

Art Unit: 3992

Page 4

8. With respect to claim 21, the fastening part includes first and second screws passing through first and second holes at a same side edge of at least one of the first and second frames (Figure 1, Masanori discloses three screw holes on each side).

- 9. With respect to claim 23, the liquid crystal display device is immovable within the housing and the fastening part includes a screw passing through at least one hole in at least one of the first and second frames (see claims 19 and 21 above).
- 10. With respect to claim 24, the fastening part includes a second screw passing through a second hole in at least one of the first and second frames at a same side (see claim 21 above).
- 11. With respect to claim 25, Masanori discloses a method of forming a liquid crystal display device comprising the steps of:

forming a liquid crystal panel having a display surface (Figures 1 and 2, LCD panel 2); and

forming a frame (Figure 1, vessel 6) substantially surrounding edges of the liquid crystal panel (see Figure 1, 6 substantially surrounds the edges of the LCD panel 2), and having a fastening part (13) at at least one side edge of the frame, the frame attachable to a housing through the side edge (see Figure 1);

Art Unit: 3992

wherein the side edge is substantially perpendicular to the display surface of the liquid crystal panel (see Figures 1 and 2, side edges with screw holes are perpendicular to the display surface).

- 12. With respect to claim 26, the fastening part includes a hole (13).
- 13. With respect to claim 29, liquid crystal device is immovable within the housing (see claim 19 above).
- 14. With respect to claims 30, 31, 33 and 34 see claims 19 and 21 above.

Claim Rejections - 35 USC § 103

- 15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komano in view of Masanori.
- 17. With respect to claim 1, Komano discloses a method of forming a liquid crystal display device comprising the steps of:

forming a liquid crystal panel (Figure 1, 11) with a display area and having front and back surfaces and a first plurality of edges;

forming a light unit (Figure 1, 12) with a second plurality of edges joined with the liquid crystal panel;

forming a first support frame (top frame 13) supporting the light unit and having a portion that extends parallel to at least one edge of the light unit;

forming a second support frame (bottom frame 13) coupled to the portion of the first frame (78 and 78a, see also c6:61-63).

However, Komano does not specifically disclose forming an outer easing (Figure 5, 50). On the other hand, Masanori teaches a method of forming a liquid crystal display device by forming a fastening part joining together a support frame of an LCD device and the outer easing with side mounting screws (see Masanori, Figures 1 and 2). Thus, Komano's LCD device mounted on a chassis using side mounting screws as taught by Masanori would disclose forming a fastening part joining together the first and second support frames and the outer easing through the portion of the first support frame that is coupled to the second support frame (side mounting screws of Masanori would penetrate Masanori's chassis and the two support frames 13, of Komano's LCD device to join them all together).

It would have been obvious to one of ordinary skill in the art, having the teachings of Komano and Masanori before him at the time the invention was made, to use the side edge mounting of LCD in a computer system as taught by Masanori to prevent deflecting deformation.

Masanori teaches that four corner screws (Masanori, Figure 1, 10) may not provide enough support for a large LCD (14" for example) to prevent deformation of the center portion of the

LCD, which may result in damage to the LCD panel when dropped during shipment (Masanori, page 5 an 6). Masanori teaches that a mounting structure that uses side mounting holes and screws (Masanori Figure 1, 11) is "capable of preventing a deflecting deformation at the center portion of the side of the liquid crystal module when a liquid crystal monitor is dropped, thereby assuring a good quality of the product." (Masanori, page 6).

The combination of the known features of a know device (Komano's LCD device with support frames joined on side edges) mounted on a chassis using a known method (Masanori's side mounting screws) produces a predictable structure (an LCD device formed with fastening parts joining together the support frames and the chassis through the portion of the support frame that is coupled to the other support frame).

- 18. With respect to claim 2, the fastening part includes a screw hole (Masanori, Figure 1, 13).
- 19. With respect to claim 3, the portion of the first frame is substantially perpendicular to the viewing surface of the display device (see Komano Figure 1 and Masanori Figure 1).
- 20. With respect to claim 4, the first frame supports the light source (see Komano Figure 1).
- 21. With respect to claim 5, the second support frame protects the liquid crystal panel (see Komano Figure 1).

- 22. Claims 6, 7, 9-14, 18, 28, 35, 36, 38-41, 43-50, 52-55, 57-62, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Masanori.
- 23. With respect to claims 6, APA discloses a method of assembling a portable computer (Figure 5) comprising a liquid crystal display device (Figure 1, 20) having a display surface (20) and a first plurality of side edges, a body having an input device (60), a cover (50), coupled to an edge of the body, having a second plurality of side edges, the method comprising step of attaching the liquid crystal display device to the cover, the liquid crystal display device being mounted to the cover (see Figure 4). However, APA does not specifically disclose that the first plurality of side edges of the liquid crystal display device is attached to the second plurality of side edges of the cover. On the other hand. Masanori specifically discloses a method of mounting a liquid crystal display device by attaching the side edges of the display device 1 to the side edges of the mounting chassis 8 in a computer (see Masanori Figure 1 and page 5, second paragraph).

It would have been obvious to one of ordinary skill in the art, having the teachings of APA and Masanori before him at the time the invention was made, to use the side edge mounting of LCD in a computer system as taught by Masanori's in the portable computer of APA to prevent deflecting deformation at the center portion of the side of the liquid crystal module when the liquid crystal monitor is dropped (Masanori, page 6, first full paragraph). APA discloses mounting the LCD assembly to the chassis with four corner screws (see Figure 5, 41 and 43). Masanori teaches that four corner screws (Masanori, Figure 1, 10) may not provide enough

Art Unit: 3992

support for a large LCD (14" for example) to prevent deformation of the center portion of the LCD, which may result in damage to the LCD panel when dropped during shipment (Masanori, page 5 an 6). Masanori teaches that a mounting structure that uses side mounting holes and screws (Masanori Figure 1, 11) is "capable of preventing a deflecting deformation at the center portion of the side of the liquid crystal module when a liquid crystal monitor is dropped, thereby assuring a good quality of the product." (Masanori, page 6).

- 24. With respect to claim 7, the attaching step uses a screw (Masanori, Figure 1, 11) joining the first plurality of side edges of the liquid crystal display device to the second plurality of side edges of the cover.
- 25. With respect to claim 9, see rejection of claim 6 above.
- 26. With respect to claim 10, APA discloses a method of forming a liquid crystal display device comprising the steps of:

forming a first support frame having a first fastening member (Figure 1, 19); forming a reflector unit adjacent the first support frame (14); forming a light source adjacent to the reflector unit (11); forming a light guide unit adjacent the reflector unit (13); forming a prism unit adjacent the light guide unit (16, 17); forming a liquid crystal panel adjacent the prism unit (20); and

Art Unit: 3992

the reflector unit, the prism unit, and the liquid crystal panel are between the first and second support frames, and the first and second support frames are attached to each other (see Figures 1, 4, and 5). However, APA does not specifically disclose that the first and second fastening members are at side edges in a narrow sense of the term "side edge" (i.e., edges on sides that are not co-planar to the display surface) of the first and second support frames, respectively, and that the first and second support frames are attached to each other through the perpendicular side edges of the support frames. On the other hand, Masanori discloses an LCD assembly with two support frames with fastening members at side edges where the support frames are attached to each other through the side edges (see Masanori Figure 1).

APA and Masanori before him at the time the invention was made, to use the side edge mounting of LCD in a computer system as taught by Masanori's in the portable computer of APA to prevent deflecting deformation at the center portion of the side of the liquid crystal module when the liquid crystal monitor is dropped (Masanori, page 6, first full paragraph). APA discloses mounting the LCD assembly to the chassis with four corner screws (see Figure 5, 41 and 43). Masanori teaches that four corner screws (Masanori, Figure 1, 10) may not provide enough support for a large LCD (14" for example) to prevent deformation of the center portion of the LCD, which may result in damage to the LCD panel when dropped during shipment (Masanori, page 5 an 6). Masanori teaches that a mounting structure that uses side mounting holes and screws (Masanori Figure 1, 11) is "capable of preventing a deflecting deformation at the center

portion of the side of the liquid crystal module when a liquid crystal monitor is dropped, thereby assuring a good quality of the product." (Masanori, page 6).

Alternatively, applying the broadest reasonable interpretation standard, APA also discloses attaching the two support frames through their edges on the right and left sides, i.e., side edges, of their respective frames as shown in Figures 4 and 5.

- 27. With respect to claim 11, at least one of the first and second fastening members includes a screw hole (Masanori, Figures 1 and 2, 12).
- 28. With respect to claim 12, the side edges of the first and second support frames are substantially perpendicular to the viewing surface of the display device (see Masanori Figure, 1).
- 29. With respect to claims 13 and 14, see APA, Figure 1.
- 30. With respect to claims 18 and 28, see rejection of claim 6 above.
- 31. With respect to claim 29, the liquid crystal device is immovable within the housing (see Figure 1, the device becomes immovable once secured with screws).
- 32. With respect to claim 35, see rejection of claim 10 above.

Art Unit: 3992

- 33. With respect to claim 36, see rejection of claim 11 above.
- 34. With respect to claim 38, see APA Figure 5.
- 35. With respect to claim 39, see claim 29 above.
- 36. With respect to claims 40, 41, 43, and 44, see Masanori Figure 1.
- 37. <u>Claims 17, 22, 27, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over</u>

 Masanori in view of Aguilera.

Masanori discloses all of the limitations of the parent claims as discussed above. However, Masanori does not specifically disclose that the fastening part includes an adhesive material. On the other hand, using an adhesive to fasten parts is well known as that is the main use of an adhesive. Moreover, Aguilera specifically discloses using double-sided adhesive foam tape to mount an LCD to a laptop computer. It would have been obvious to one of ordinary skill in the art, having the teachings of Masanori and Aguilera before him at the time the invention was made, to use double-sided adhesive foam tape or other similar adhesive in addition to, or in place of, the side mounting screws to provide more rigid support for the LCD against accidental flexing that can damage the LCD panel. Adhesives can be applied to the entire side edges providing for more secure mounting of the LCD to the mounting frame.

Art Unit: 3992

38. Claims 37, 42, 51, 56 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Masanori and further in view of Aguilera.

APA and Masanori disclose all of the limitations of the parent claims as discussed above. However, APA and Masanori do not specifically disclose that the fastening part includes an adhesive material. On the other hand, using an adhesive to fasten parts is well known as that is the main use of an adhesive. Moreover, Aguilera specifically discloses using double-sided adhesive foam tape to mount an LCD to a laptop computer. It would have been obvious to one of ordinary skill in the art, having the teachings of APA, Masanori and Aguilera before him at the time the invention was made, to use double-sided adhesive foam tape or other similar adhesive in addition to, or in place of, the side mounting screws to provide more rigid support for the LCD against accidental flexing that can damage the LCD panel. Adhesives can be applied to the entire side edges providing for more secure mounting of the LCD to the mounting frame.

- 39. Claims 45-50, 51-55, 57-62, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Masanori and further in view of Komano.
- 40. With respect to claim 45, APA discloses a method of making a portable computer comprising the steps of:

forming a liquid crystal display device comprising the steps of:

forming a first frame (Figure 1, 19);

forming a reflector unit adjacent to the first frame (14);

forming a light source adjacent to the reflector unit (11);

Art Unit: 3992

forming a light guide unit adjacent to the light source (13);

forming a liquid crystal panel adjacent to the light guide unit (21); and

forming a second frame having a first side edge (40 or 20), wherein the reflector unit, light source, the light guide unit and the liquid crystal panel are between the first and second frames (see Figures 1 and 4; see also col. 2, lines 12-21);

forming a body having an input device (Figure 5, 60);

forming a cover (50) joined with the body and having a second side edge; and forming a fastening part joining together the liquid crystal display and the cover (Figure 5, 41, 43). However, APA does not specifically disclose that the LCD is joined to the cover through the side edges of the device in a narrow sense of the term "side edge" (i.e., edges on sides that are not co-planar to the display surface). On the other hand, Masanori specifically discloses a method of joining an LCD device to a computer chassis through the side edges of the LCD device (Masanori, Figure 1).

APA and Masanori before him at the time the invention was made, to use the side mounting technique as taught by Masanori to mount a large LCD device on a portable computer of APA, to prevent deflecting deformation at the center portion of the side of the liquid crystal module when the liquid crystal monitor is dropped (Masanori, page 6, first full paragraph). Masanori teaches that a mounting structure that uses side mounting holes and screws (Masanori Figure 1, 11) is "capable of preventing a deflecting deformation at the center portion of the side of the liquid crystal module when a liquid crystal monitor is dropped, thereby assuring a good quality of the product." (Masanori, page 6).

. S. .

APA and Masanori disclose a portable computer with and LCD device mounted using screws on the side edges. However, they do not disclose that a fastening part joins together the LCD and the cover through the two side edges of the two frames of the LCD device because in the LCD device disclosed by Masanori the side edges of the two frames do not overlap. On the other hand, Komano teaches an LCD device where two supporting frames have overlapping side edges (Komano, Figure 1, side edges of the support frames 43 and 44 overlap to form a single unit when assembled). Komano's LCD device when mounted using screws on the side edges as taught by Masanori on the portable computer of APA disclose all of the elements of the claimed portable computer.

It would have been obvious to one of ordinary skill in the art, having the teachings of APA, Masanori, and Komano before him at the time the invention was made, to use the LCD assembling technique taught by Komano in the portable computer with side mounted LCD device of APA and Masanori, to improve productivity (Komano, col. 1, lines 43-47). Komano discloses that his invention provides effective support for the LCD device components and is easy to assemble (Komano, col. 1, lines 61-66).

Alternatively, applying the broadest reasonable interpretation standard, APA also discloses attaching the two support frames through their edges on the right and left sides, i.e., side edges, of their respective frames as shown in Figures 4 and 5.

- 41. With respect to claim 54, see rejection of claim 45 above.
- 42. With respect to claims 46-50, 52, 53, 55, 57-62, 64,65see Masanori Figure 1, 11 and 13.

Art Unit: 3992

43. Claims 8, 51, 56 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA, Masanori, and Komano and further in view of Aguilera.

APA, Masanori and Komano disclose all of the limitations of the parent claims as discussed above. However, APA, Masanori and Komano do not specifically disclose that the fastening part includes an adhesive material. On the other hand, using an adhesive to fasten parts is well known as that is the main use of an adhesive. Moreover, Aguitera specifically discloses using double-sided adhesive foam tape to mount an LCD to a laptop computer. It would have been obvious to one of ordinary skill in the art, having the teachings of APA, Masanori. Komano and Aguilera before him at the time the invention was made, to use double-sided adhesive foam tape or other similar adhesive in addition to, or in place of, the side mounting screws to provide more rigid support for the LCD against accidental flexing that can damage the LCD panel.

Adhesives can be applied to the entire side edges providing for more secure mounting of the LCD to the mounting frame.

Amendment in Reexamination Proceedings

44. Patent Owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.52(a) and (b), and must contain any fees required by 37 CFR 1.20(c).

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to

this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced. See MPEP § 2250(IV) for examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

Service of Papers

45. After filing of a request for ex parte reexamination by a third party requester, any document filed by either the patent owner or the third party requester must be served on the other party (or parties where two or more third party requester proceedings are merged) in the reexamination proceeding in the manner provided in 37 CFR 1.248. The document must reflect service or the document may be refused consideration by the Office. See 37 CFR 1.550(f).

Extensions of Time

46. Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

Litigation Reminder

47. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving

Art Unit: 3992

Page 18

Patent No. 5,926,237 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. Sec MPEP §§ 2207, 2282 and 2286.

Art Unit: 3992

All correspondence relating to this ex parte reexamination proceeding should be directed as follows:

Page 19

By U.S. Postal Service Mail to:

Mail Stop Ex Parte Reexam
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900

Central Reexamination Unit

By hand to: Customer Service Window

Randolph Building 401 Dulany St.

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Woo H. Choi

Primary Examiner

Central Reexamination Unit 3992

ESK